REMARKS / DISCUSSION OF ISSUES

The present amendment is submitted in response to the Final Office Action mailed June 8, 2011. Claims 1-21 remain in this application. Claims 1 and 11 have been amended. In view of the amendments above and the remarks to follow, reconsideration and allowance of this application are respectfully requested.

Interview Summary

Applicants appreciate the courtesy granted to Applicant's attorney, Michael A. Scaturro (Reg. No. 51,356), during a telephonic interview conducted on Monday, July 25, 2011. During the telephonic interview, a proposed amendment to claim 1 was presented to highlight differences between the proposed claim limitations and the cited and applied art. The Examiner appreciated the points of distinction raised by Applicant's attorney and will take them into account upon receiving a formal response, however no agreement was reached regarding whether the new limitations overcome the cited and applied art.

Claim Rejections under 35 USC 103

I. In the Office Action, Claims 1-21 stand rejected under 35 U.S.C. §103(a) as being anticipated by U.S. Patent Application No. 2002/0027839 to ("Ueki") and further in view of U.S. Patent Application No. 2002/0012530 to ("Bruls") and U.S. Patent Application No. 2006/0140584 to ("Ellis"). Applicants respectfully traverse the rejections.

Claims 1-21 are allowable

Independent Claim 1 has been amended herein to better define Applicant's invention over the applied art (Ueki / Bruls / Ellis). Claim 1 now recites limitations and/or features which are not disclosed by the applied art (Ueki / Bruls / Ellis), taken alone and in any reasonable combination. Therefore, the cited portions of the applied art (Ueki / Bruls / Ellis) do not anticipate claim 1, because the cited portions of Ueki / Bruls / Ellis do not teach every element of claim 1. Claim 1 is reproduced below in clean form.

1. A method of recording multiple sets of broadcasted media data streams and programs on at least one non-transitory data carrier, comprising the steps of:

a) receiving in a receiver said multiple sets of broadcasted media data streams and programs over one or more data channels at different transmission frequencies,

b) manually programming one or more program timers indirectly via an EPG or directly for recording at least two unrelated selected media data streams and programs from among the received multiple sets of broadcasted media data streams and programs to be recorded on the at least one data carrier in a timed recording sequence,

c) reading the settings of the one or more programmed program timers including the start and end time of each selected media data stream and program,

d) calculating the total recording length of all selected media data streams and programs from the settings of the one or more program timers,

e) determining the available recording space on the at least one data carrier for all of said remaining unrecorded media selected data streams and programs to be recorded in the timed recording sequence,

f) resetting a determined recording quality for all of said remaining unrecorded selected data streams and programs to be recorded in the timed recording sequence so as to enable all of said remaining unrecorded selected data streams and programs to be fitted to the available space,

g) recording data comprising a selected one of said remaining unrecorded selected data streams and programs in accordance with the set recording quality determined at step (f)

h) repeating the steps of determining, resetting and recording until all remaining unrecorded selected data streams and programs have been recorded.

Claim 1 has been amended to more clearly and precisely recite novel features not taught or suggested by the combination of the applied art (Ueki / Bruls / Ellis). It is respectfully submitted that none of Ueki / Bruls / Ellis, alone or in combination, teach a method of recording at least two unrelated media streams and programs in an iterative sequential process so as to enable each of the at least two unrelated media streams and programs to be fitted into the available space. Specifically, none of the applied art teaches the steps of:

e) determining the available recording space on the at least one data carrier for all of said remaining unrecorded media selected data streams and programs to be recorded in the timed recording sequence,

f) resetting a determined recording quality for all of said remaining unrecorded selected data streams and programs to be recorded in the timed recording sequence so as to enable all of said remaining unrecorded selected data streams and programs to be fitted to the available space,

g) recording data comprising a selected one of said remaining unrecorded selected data streams and programs in accordance with the set recording quality determined at step (f).

It should be appreciated that in each iteration of determining, resetting and recording, it is necessary to determine, at the determination step, the available recording space in consideration of the recording of a data stream or program in the immediately preceding iteration. It is also necessary, in each iteration, to reset the recording quality based on the actual recording space consumed, which is necessarily changed based on the previously recorded data stream or program in the immediately preceding iteration. It is respectfully submitted that these determinations and calculations made in each iteration, which are dependent upon the recording of a data stream or program in an immediately preceding iteration are neither taught nor suggested in the applied art (Ueki / Bruls / Ellis).

It should also be appreciated that the number of iterations required corresponds to the number of data streams and programs in the set to be recorded.

It is important to note that the invention affords advantages that allow **multiple sets of data to be recorded** such that all of the data fit into the available recording space of at least one data carrier. Applicant's specification recites these advantages and others at page 4, lines 6-16.

> The present invention enables **sets of data to be recorded such that they fit to an available recording space of at least one data carrier**. The recording quality can furthermore be set to the highest possible recording quality. A user is furthermore relieved from having to be involved every time an actual recording is to take place; his involvement is required only at the start of setting a recording sequence.
>
> The basic idea of the invention is to **determine the available recording space on at least one data carrier for all unrecorded sets of data of a timed recording sequence to be recorded on the at least one carrier, and to set the recording quality so that all sets of unrecorded data in the timed recording sequence fit to the available space, and to record a set of data with the set recording quality, and to repeat the steps of determining, setting and recording for each set of unrecorded data, until all sets have been recorded.**

The Office cites Bruls at par. 2 and 22 for allegedly teaching applicant's step (f) as recited in Applicant's previous response, mail date 3/7/2011.

> "**f.** setting the determined recording quality for all of said unrecorded selected data streams and programs to be recorded in the timed recording sequence so as to enable all of said unrecorded selected data streams and programs to be fitted to the available space."

Claim 1, as amended, now more precisely recites that the recording quality **is reset in each iteration** of determining, **setting** and recording, so as to enable **all of said remaining unrecorded selected data streams and programs to be fitted to the available space.**

> f) **resetting** a determined recording quality for all of **said remaining unrecorded selected data streams and programs to be recorded** in the timed recording sequence so as to enable all of said remaining unrecorded selected data streams and programs to be fitted to the available space,

It is respectfully submitted that Bruls neither teaches nor suggests applicant's resetting step while taking into consideration **those remaining unrecorded data streams and programs.** Instead, Bruls sets the recording quality in consideration of a single program. See Bruls, par. 2.

It should be understood that Bruls does not take into consideration setting the recording quality in consideration of two or more remaining unrecorded data streams and programs. Bruls describes at par. 22, that a bit rate is set in dependence upon, (1) the duration of the program to be encoded, and (2) information relating to the available data space. However, there is no teaching or suggestion of setting the bit rate in dependence upon factors other than (1) and (2). That is, Bruls does not set the bit rate in dependence upon a number of remaining **unrecorded data streams and programs).**

In the Office Action, at page 4, it is alleged that recording complex and less complex program in Bruls according to user setting, reads on setting the determined recording quality for all of said unrecorded selected data streams and programs. It should be noted that Bruls merely teaches at par. 22 a system controller arranged to establish a program complexity used

to control the settings of the compression unit, so as to set a higher compression that may be a more complex program. Irrespective of the complexity of the program, however, the bit rate is not set in consideration of more than 1 program.

Bruls states at par. 22

> . **Information relating to the duration of a program to be encoded is available for the system controller 25 via a time input 24, and information relating to the data space via a data space input 27. The time information is, for example, a start and end time of a program to be set by a user, or the duration of the program. The system controller calculates from this information the data space available for the encoded signal and sets the bit rate via the control input 26 so that the program is expected to fill the available data space completely. For example, the available data space is divided by the required duration**
>
> **According to the invention the system controller is arranged to establish a program complexity as described below. The program complexity will be used to control the settings of the compression unit, so as to set a higher compression for a more complex program**

In other words, Bruls merely discloses that control settings are set in accordance with the complexity of **a single program to be recorded**. That is, the system controller does not take into account multiple unrecorded programs when determining how to control the settings of the compression unit**.**

In the Office Action, Ueki is cited for allegedly curing this deficiency in Bruls. Ueki is cited for allegedly teaching a method for recording multiple sets of broadcasted media. However, the "n"' information signals of Ueki are not recorded in the same manner claimed by Applicants. Specifically, the "n" information signals are recorded on a time shared basis and at pre-determined rates, as disclosed for example at par. 360 of Ueki. These features of Ueki teach away from recording a set of signals in the iterative manner recited in Claim 1, and as described above. It is well established that recording on a time-shared basis is a parallel process for recording data streams. In sharp contrast to Ueki, Applicants process of recording data streams is sequential and iterative.

In further contrast to Ueki, it is disclosed in Ueki at par. 348 that the "n" information signals are transmitted at corresponding transfer rates of R_1-R_n. As briefly described above, the transfer rates R_1-R_n are pre-determined transfer rates that have been independently established prior to recording any of the "n" information signals. As such, Ueki fails to cure the deficiency of Bruls in that Ueki does not teach or suggest at least Applicant's step (f) of resetting a determined recording quality (i.e., transfer rate) in each iteration for all of the unrecorded selected data streams and programs to allow them to be fitted to the available space.

> f) resetting a determined recording quality for all of said remaining unrecorded selected data streams and programs to be recorded in the timed recording sequence so as to enable all of said remaining unrecorded selected data streams and programs to be fitted to the available space,

Further, according to Applicant's method, in each iteration of determining, resetting and recording, once the recording rate is re-set at step (f), only thereafter does the recording begin for that particular iteration, as claimed in step (g). As previously argued in Applicant's previous response, mail date 3/17/2011, Bruls adapts the bit rate **during the recording process.** That is, Bruls discloses dynamically varying a bit-rate to record a single program of finite duration. Specifically, Bruls discloses a single program of a predefined duration being converted by a compression process (encoded) into digital data **with a bit rate influenced for fitting the program in a vacant data space**. A remaining part of the vacant space and a remaining part of the duration are determined during the coding process. A bit-rate in Bruls is attuned to the available data space to achieve a high average picture quality. A target bit-rate to be achieved is calculated from the available data space and the time to be recorded. When the actual bit-rate deviates from a target bit rate, compression settings are adjusted. It should be understood that the process of dynamically adjusting the actual bit rate to match the target bit rate is a continuous dynamic process in Bruls with no regard to what portion of the program is being recorded. Bruls teaches at par. 5, the data space available for storage on the disc is filled by **attuning the bitrate of the coded video program to the available data space** to achieve a high average picture quality. Bruls further discloses at par. 22, during the

recording, the remaining tape length may be computed more accurately by the tape recording device and **the bit rate may be adapted thereto**.

Ellis is cited in the Office Action at page 2 only for teaching, "programs over one or more data channels at different transmission frequencies." As such, Ellis does not cure the deficiencies of Bruls and Ueki.

Consequently, it is asserted that independent claim 1 is patentable over the cited prior art and claims 2-10 are allowable, at least by virtue of their respective dependence from claim 1.

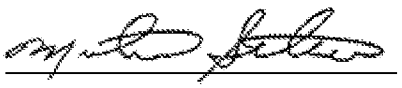
Independent Claim 11 has also been amended consistent with the concepts provided by the structural and/or operational relationships described above and recites similar subject matter as Independent Claim 1 and therefore contains the limitations of Claim 1. Hence, for at least the same reasons given for Claim 1, Claim 11 is believed to recite statutory subject matter under 35 USC 103(a). Claims 12-21 are allowable, at least by virtue of their respective dependence from claim 11.

Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1-21 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Mike Belk, Esq., Intellectual Property Counsel, Philips Electronics North America, at 914-945-6000.

Respectfully submitted,



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